



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,324	08/23/2006	Tsuyoshi Oyaizu	295193US0PCT	8106
22850	7590	10/08/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER WALFORD, NATALIE K	
			ART UNIT 2879	PAPER NUMBER
			NOTIFICATION DATE 10/08/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,324	<b>Applicant(s)</b> OYAIZU ET AL.	
	<b>Examiner</b> NATALIE K. WALFORD	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (WO 03/019608). The Examiner notes that for examination purposes, the English equivalent will be used (US 7,075,220).

Regarding claim 1, Ito discloses an image display device in figures 1 and 3, comprising: a face plate having a phosphor screen including a light absorption layer (item 5) and a phosphor layer (item 6) which are formed in a predetermined pattern on a glass substrate (item 4), and a metal back layer (item 1) formed on the phosphor screen; and a rear plate having a number of electron emission elements (item 11) formed on a substrate (item 12), and disposed to face the face plate, wherein the metal back layer includes an electrically divided portion formed in a predetermined pattern (see FIG. 1), a covering layer containing a component melting or oxidizing a metal material (column 6, lines 13-26) composing the metal back layer (item 8) and heat resistant fine particles (item 7) respectively, and having concaves and convexes at a surface

Art Unit: 2879

resulting from the heat resistant fine particles (see FIG. 2), is formed in the divided portion (see FIG. 1), and a getter layer (item 3) divided by the covering layer is formed on the metal back layer in a film shape.

Regarding claim 2, Ito discloses the image display device as set forth in claim 1, wherein the electrically divided portion of the metal back layer is positioned on the light absorption layer (see FIG. 1).

Regarding claim 3, Ito discloses the image display device as set forth in claim 1, wherein the component melting or oxidizing the metal material composing the metal back layer is an acidic substance with a pH of 5.5 or less or an alkaline substance with a pH of 9 or more (column 6, lines 54-60).

Regarding claim 4, Ito discloses the image display device as set forth in claim 2, wherein in the light absorption layer, at least a portion positioning at a lower layer of the electrically divided portion of the metal back layer has a surface resistance of  $1 \times 10^{-5} \Omega$  to  $1 \times 10^{12} \Omega$ . The Examiner notes that Ito has described the same light absorption layer as described by Applicant. It would inherently have the same properties, including Applicant's claimed limitation of the surface resistance.

Regarding claim 5, Ito discloses the image display device as set forth in claim 1, wherein an average particle size of the heat resistant fine particle is from 5 nm to 30  $\mu\text{m}$  (column 2, lines 59-61).

Regarding claim 6, Ito discloses the image display device as set forth in claim 1 wherein the heat resistant fine particles are at least one kind of particles of oxide selected from  $\text{SiO}_2$ ,  $\text{TiO}_2$ ,  $\text{Al}_2\text{O}_3$ , and  $\text{Fe}_2\text{O}_3$  (column 2, lines 60-63).

Art Unit: 2879

Regarding claim 7, Ito discloses the image display device as set forth in claim 1, wherein the getter layer is a metal layer selected from Ti, Zr, Hf, V, Nb, Ta, W, and Ba, or an alloy layer of which a main constituent is at least one kind of metal selected from these metals (column 2, lines 63-65).

Regarding claim 8, Ito discloses a manufacturing method of an image display device in figures 1 and 3, comprising: forming a phosphor screen in which a light absorption layer (item 5) and a phosphor layer (item 6) are arranged in a predetermined pattern at an inner surface of a face plate (item 4); forming a metal back layer (item 1) by forming a metal film on the phosphor screen; forming a vacuum envelope including the face plate (see FIG. 3); and disposing an electron emission source (item 11) inside of the vacuum envelope to face the phosphor screen, wherein the manufacturing method of the image display device includes forming a covering layer containing a component melting or oxidizing (column 6, lines 13-26) the metal film (item 8) and heat resistant fine particles (item 7) respectively at a predetermined region on the metal back layer composed of the metal film, and removing or increasing a resistance of the metal film at a portion the covering layer is formed (see FIG. 1), and forming a getter layer (item 3) by depositing a getter material from above the covering layer.

Regarding claim 9, Ito discloses the manufacturing method of the image display device as set forth in claim 8, wherein the getter layer in a film shape is formed at a non-forming region of the covering layer on the metal back layer in forming the getter layer (see FIG. 1).

Regarding claim 10, Ito discloses the image display device as set forth in claim 5, wherein the heat resistant fine particles are at least one kind of particles of oxide selected from

Art Unit: 2879

SiO<sub>2</sub>, TiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, and Fe<sub>2</sub>O<sub>3</sub> (column 2, lines 60-63).

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012.

The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nkW  
/Natalie K Walford/  
Examiner, Art Unit 2879

/Sikha Roy/  
Primary Examiner, Art Unit 2879